# **Montgomery County Police Department Performance Review**

Tom Manger, Chief of Police November 20, 2009



## **CountyStat Principles**

- Require Data-Driven Performance
- Promote Strategic Governance
- Increase Government Transparency
- Foster a Culture of Accountability



# **Agenda**

- Welcome and Introductions
- Headline Measures
- Using Crime Analysis to Monitor Trends and Measure Progress
- Wrap-up and Follow-up Items

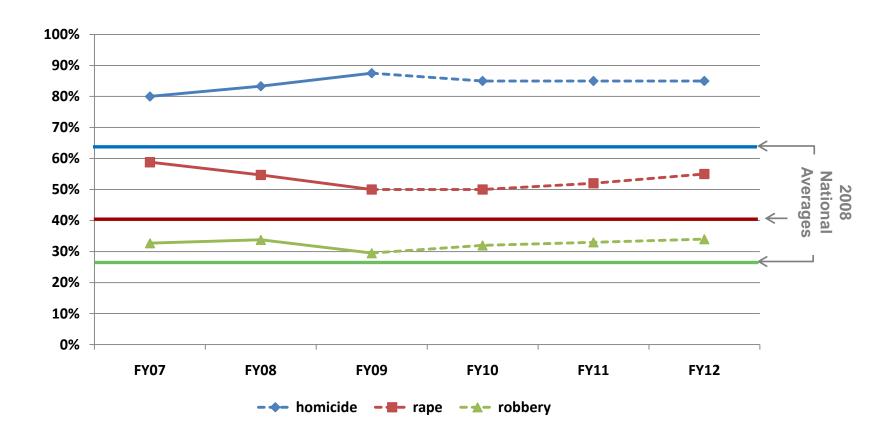


#### **Headline Measures**

- 1) Crime Investigation and Closure
  - Homicide Closure Rate
  - Rape Closure Rate
  - Robbery Closure Rate
- 2) 911 Call Response
  - Average Emergency 911 Call Response Time
  - Average Time to Answer 911 Call
  - ECC Call Volume (Emergency and Non-Emergency)
- 3) Traffic Enforcement and Management
  - Annual Traffic Collisions
  - Average Percent Change in Speeding Violations in Areas Monitored by Speed Cameras



# **Headline Measure: Crime Investigation and Closure**



MCP maintains a closure rate higher than the national average and strives to stay above that rate.



# **Crime Investigation and Closure: Historical Data**

		Offenses	Closed by Arrest	Arrest Rate	Closed by Exception	Exception Rate	Total Closures	Closure Rate	National Average
œ	Murder	21	14	67%	1	5%	15	71%	63.6%
2008	Rape	131	29	22%	35	27%	64	49%	40.4%
7	Robbery	1100	228	21%	105	10%	333	30%	26.8%
	·								
_	Murder	19	10	53%	6	32%	16	84%	61.2%
2007	Rape	129	38	29%	33	26%	71	55%	40.0%
N	Robbery	1096	251	23%	111	10%	362	33%	25.9%
	·								
9	Murder	16	10	63%	3	19%	13	81%	60.7%
2006	Rape	141	42	30%	40	28%	82	58%	40.9%
~	Robbery	1166	303	26%	96	8%	399	34%	25.2%
	,								
5	Murder	20	17	85%	2	10%	19	95%	62.1%
2002	Rape	150	35	23%	28	19%	63	42%	41.3%
N	Robbery	1035	259	25%	69	7%	328	32%	25.4%

Figures include all events, regardless of which unit investigated.

Closures made in any year include those for cases from earlier years, so it is not a one-to-one comparison.

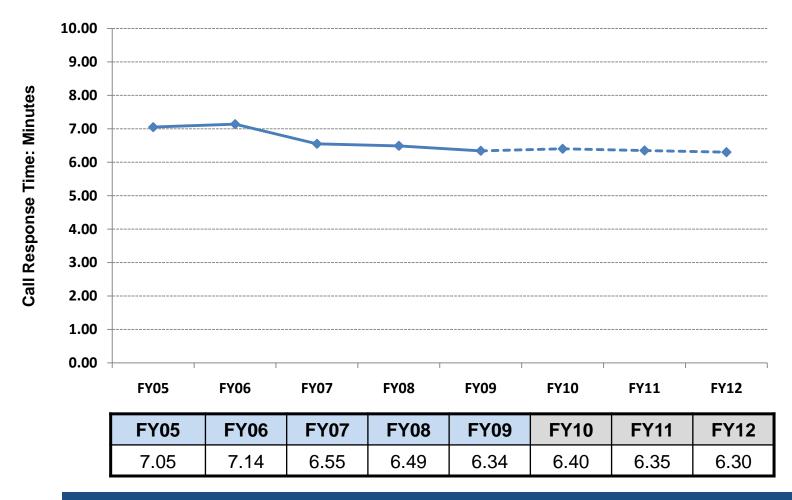
National averages source: www.fbi.gov/ucr/ucrhtm#cius



CountyStat

Source: MCP

## **Headline Measure: 911 Call Response Time**



The national standard for emergency response is within 7 minutes.



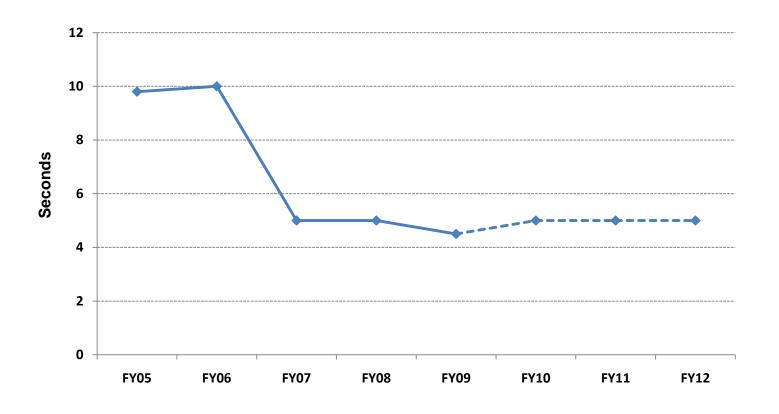
# 911 Call Response Time By District Data

Response Times for <b>Emergency</b> ( <b>Priority Response</b> ) Calls for Service	1st District	2nd District	3rd District	4th District	5th District	6th District	County Time
Average Time to Answer 9-1-1 Calls	0:00:05	0:00:05	0:00:05	0:00:05	0:00:05	0:00:05	0:00:05
Average Time for Call Taker to process call and create CAD Event	0:01:51	0:01:51	0:01:51	0:01:51	0:01:51	0:01:51	0:01:51
Average Time for Dispatcher to dispatch CAD Event	0:00:47	0:00:46	0:00:46	0:00:44	0:00:43	0:00:45	0:00:45
Average Field Unit Travel Time to Event	0:04:41	0:04:05	0:03:22	0:03:39	0:04:32	0:03:34	0:03:53
Average Response Time	0:07:24	0:06:47	0:06:04	0:06:19	0:07:11	0:06:15	0:06:34

- District 3, 4, and 6 are geo-based deployment, which was first implemented in 2004.
- •Geo-based deployment requires more officers and aim to increase density of police officers and reduce response times.



# **Headline Measure: Average Time To Answer 911 Call**



FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
9.8	10	5	5	4.5	5	5	5



# **ECC Call Process and Dispatch Time Data**

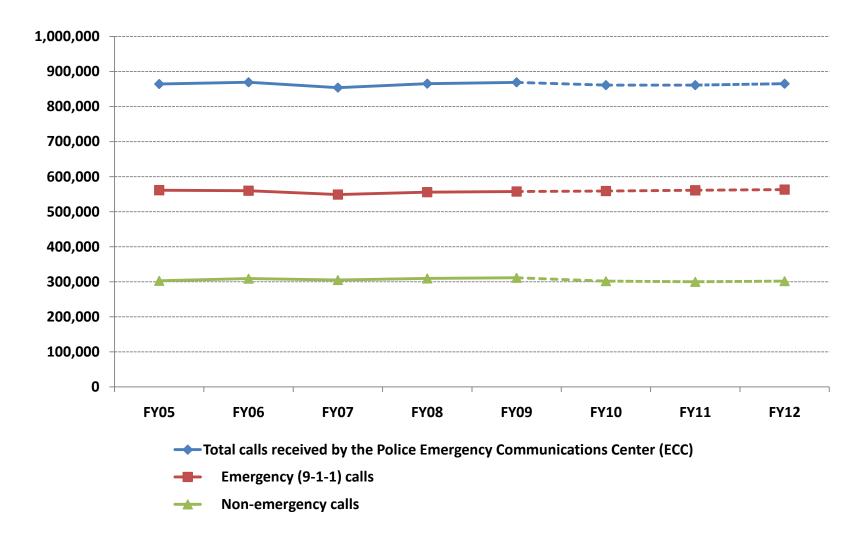
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average time to	2007	00:06	00:04	00:04	00:05	00:05	00:06	00:05	00:06	00:05	00:04	00:04	00:05
answer 9-1-1 calls	2008	00:04	00:05	00:05	00:05	00:05	00:05	00:04	00:05	00:05	00:05	00:05	00:05
	2009	00:04	00:04	00:04	00:04	00:05	00:05	00:05	00:04	00:06	00:06		
Average time to	2007	01:53	01:56	01:56	01:57	01:56	01:55	01:54	01:58	01:52	01:55	01:50	01:54
process call and	2008	01:51	01:54	01:48	01:55	01:49	01:47	01:50	01:48	01:52	01:55	01:51	01:49
create Priority CAD event	2009	01:47	01:48	01:48	01:55	01:46	01:51	01:47	01:54	01:51	01:49		
Average time to	2007	00:57	00:57	00:56	00:56	00:52	00:55	00:53	00:55	00:52	00:51	00:52	00:54
dispatch Priority	2008	00:49	00:49	00:48	00:52	00:48	00:49	00:47	00:45	00:46	00:45	00:45	00:46
CAD event	2009	00:48	00:48	00:46	00:42	00:39	00:45	00:44	00:43	00:46	00:44		
Average time	2007	02:56	02:57	02:56	02:58	02:53	02:56	02:52	02:59	02:49	02:50	02:46	02:53
Priority Event in	2008	02:44	02:48	02:41	02:52	02:42	02:41	02:41	02:38	02:43	02:45	02:41	02:40
ECC (Cumulative Total)	2009	02:39	02:40	02:38	02:41	02:30	02:41	02:36	02:41	02:43	02:39		



CountyStat

Source: MCP

#### **Headline Measure: ECC Call Volume**





#### **Headline Measure: ECC Call Volume**

	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
Total ECC Police calls received	864,213	869,115	854,007	865,235	869,005	861,000	861,000	865,000
Emergency (9-1-1)	561,361	559,932	548,828	555,643	557,532	559,000	561,000	563,000
Non-emergency	302,852	309,183	305,179	309,592	311,473	302,000	300,000	302,000

From FY05 to FY09, an average of 36% of total Police ECC calls were categorized as non-emergency.

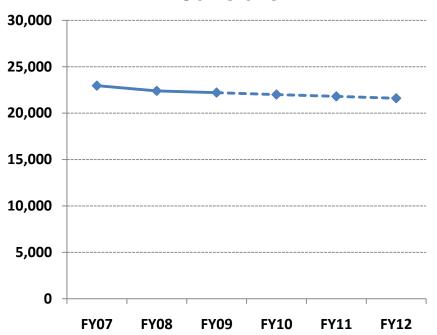


CountyStat

Source: MCP

#### **Headline Measure: Traffic Collisions**

# Montgomery County Collisions



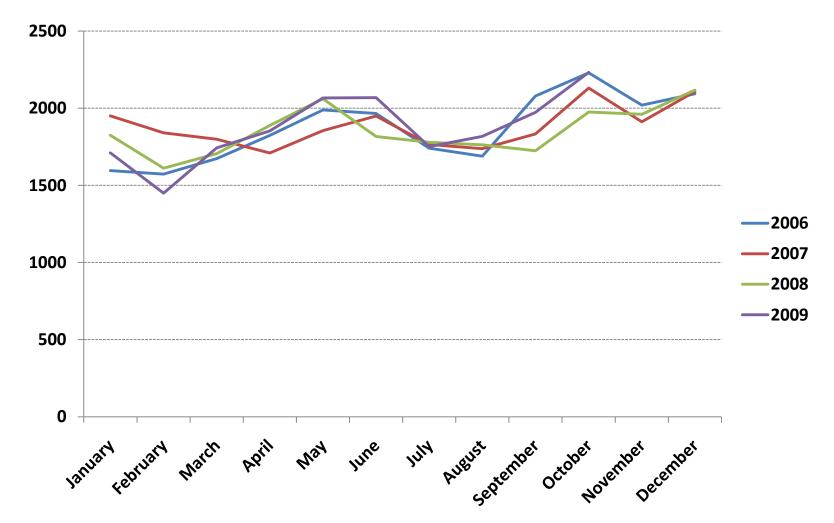
FY07	FY08	FY09
22,954	22,393	22,209
FY10	FY11	FY12
22,000	21,800	21,600

#### Regional Comparison of Annual Vehicle Miles Traveled per 100,000

COUNTY	2005	2006	2007	2008
Baltimore	1,050	1,050	1,047	1,047
Frederick	1,347	1,352	1,339	1,298
Howard	1,396	1,385	1,394	1,379
Montgomery	810	806	803	783
Prince George's	1,056	1,043	1,056	1,062
Arlington	852	836	813	776
Fairfax	946	949	1,002	1,030
Loudoun	847	846	862	794
Prince William	927	889	888	923



#### **Traffic Collision Seasonal Trends**





# **Traffic Collision Historical Data**

	2006	2007	2008	2009
January	1596	1950	1825	1711
February	1573	1840	1611	1449
March	1673	1799	1705	1743
April	1824	1710	1888	1853
May	1989	1855	2061	2066
June	1966	1949	1816	2068
July	1741	1765	1779	1751
August	1689	1738	1763	1817
September	2079	1833	1724	1973
October	2229	2131	1975	2232
November	2020	1912	1961	TBD
December	2093	2108	2117	TBD
Totals	22472	22590	22225	18663



CountyStat

Source: MCP

# **Headline Measure: Change in Speed Camera Violations**

		FY2008	FY2009		
	Q2	Q3	Q4	Q1	Q2
	27.8	35.7	18.45	39.2	29.1
Average Decrease		- 27.3%		- 34	.2%



# Using Crime Analysis to Monitor Trends and Measure Progress

#### **Operational Opportunities**

- Guide officer deployments based on geographic needs
- Identify emerging trends in crime
- Lead to creation of special units
- Engage in predictive analysis

#### **Performance Monitoring Opportunities**

- Gauge effectiveness of police operations in high incident areas
- Provide greater intelligence-gathering capabilities
- Test the effectiveness of new strategies
- Determine successfulness of preventative efforts

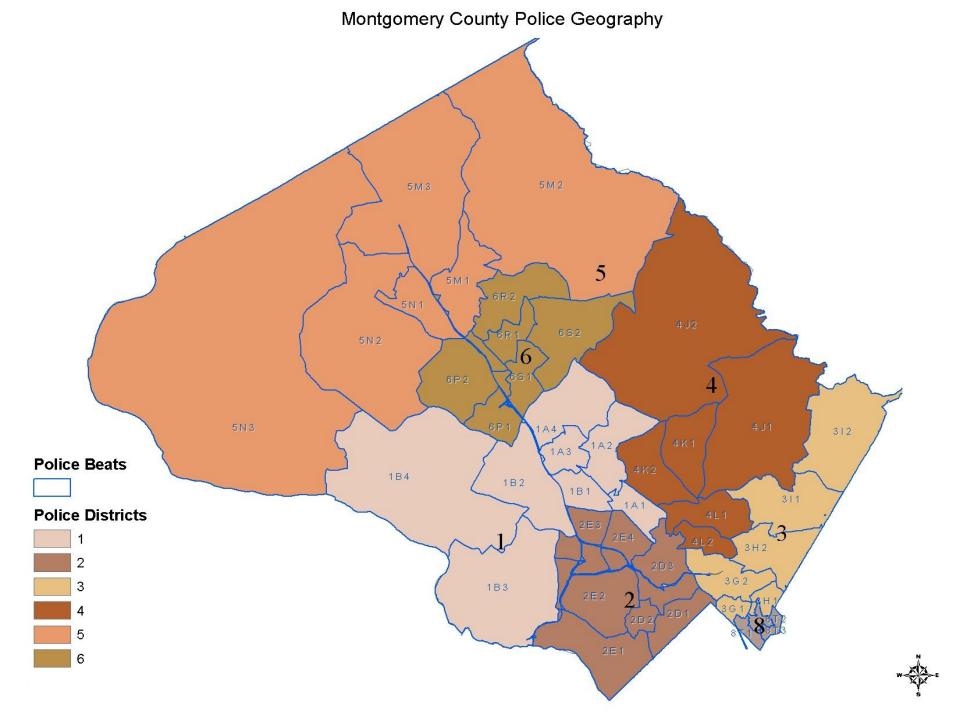
#### **Select Crime Analysis Example**

- Identified four types of crime for analysis
  - Robbery, Burglary, Aggravated Assault, Thefts from Vehicle
- Conducted geospatial and data analysis to uncover high-incident areas and associated trends

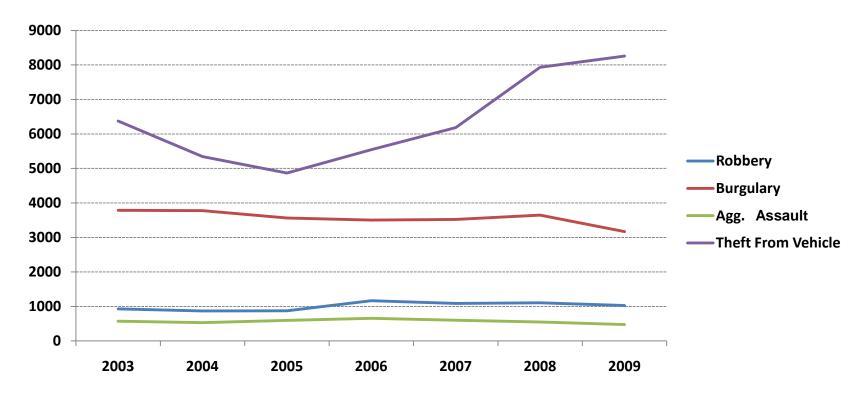
# Goal of Crime Analysis Example

- Demonstrate how this type of analysis can guide prevention and intervention methodologies
- Establish baseline for developing pre- and post-analysis of crime in high-incident areas that demonstrates effectiveness of police methods





# **Annual Trends in Select Crime Types FY03-FY09**

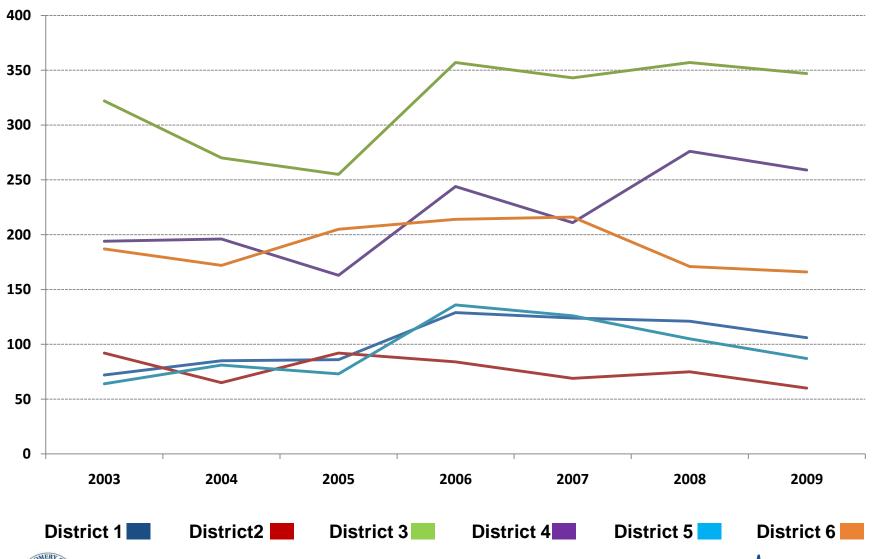


	2003	2004	2005	2006	2007	2008	2009
Robbery	931	869	874	1164	1089	1105	1025
Burglary	3787	3777	3565	3502	3523	3645	3171
Agg. Assault	572	531	595	656	600	549	477
Theft From Vehicle	6374	5344	4865	5545	6182	7933	8257





# **Robbery Crime Analysis: Total at District Level**





# **Robbery Crime Analysis: Total at District Level**

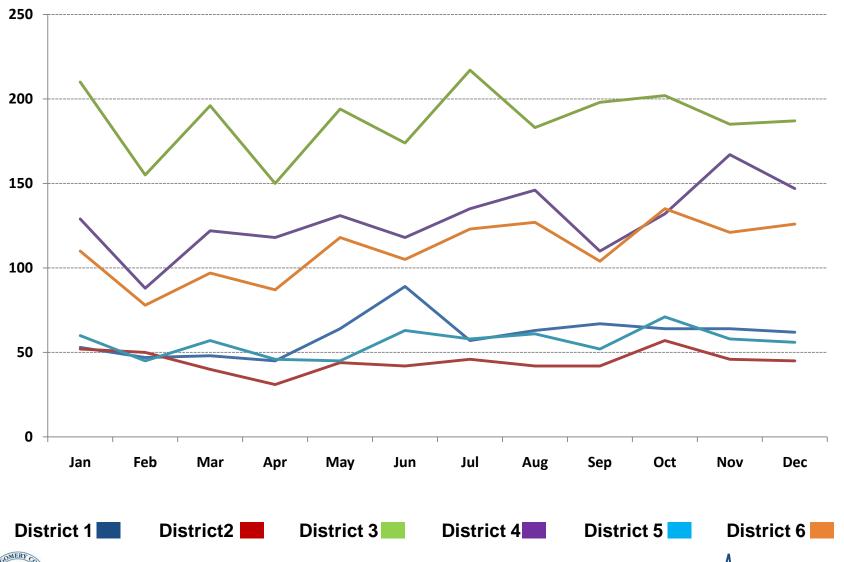
Police District	2003	2004	2005	2006	2007	2008	2009	Grand Total	Percent of Total
1	72	85	86	129	124	121	106	723	10%
2	92	65	92	84	69	75	60	537	7%
3	322	270	255	357	343	357	347	2251	30%
4	194	196	163	244	211	276	259	1543	21%
5	64	81	73	136	126	105	87	672	9%
6	187	172	205	214	216	171	166	1331	18%

Analysis of robbery crime data indicates higher instances of robbery crime within the 3<sup>rd</sup> District and spikes in overall robbery instances during the autumn months.





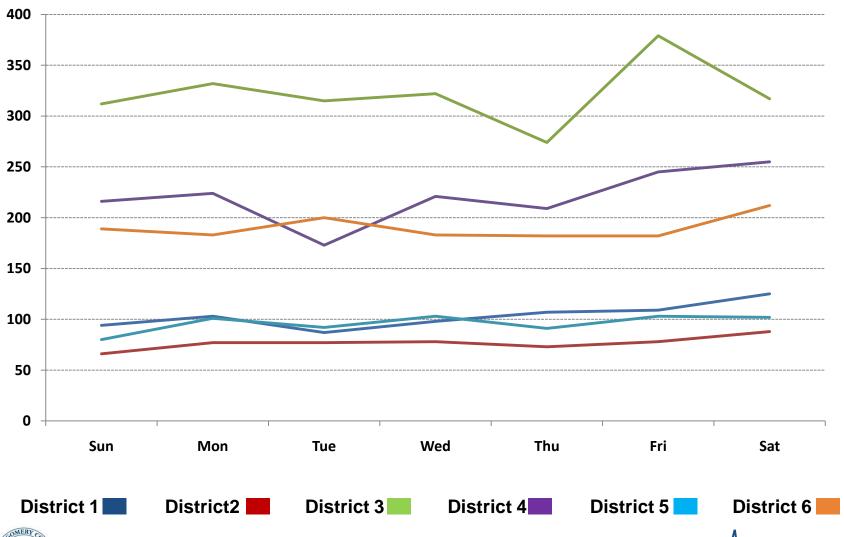
# **Robbery Crime Analysis: Seasonal Trends**



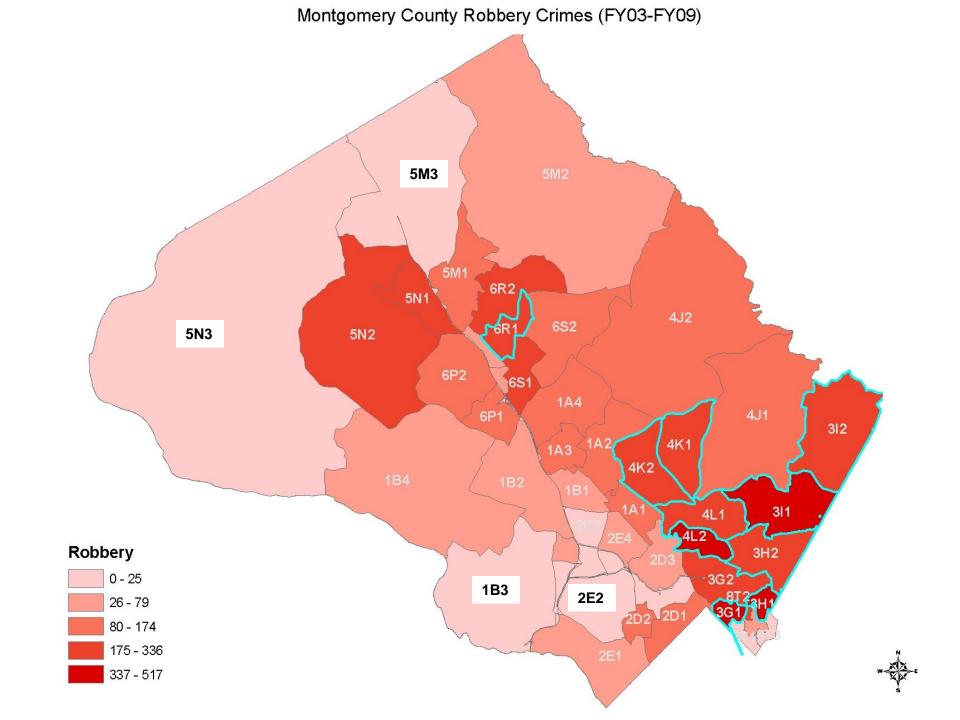




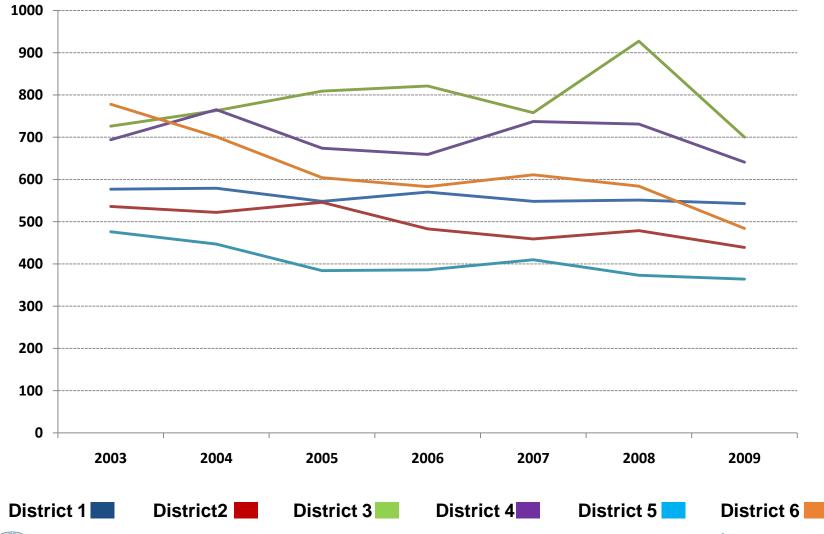
# **Robbery Crime Analysis: Day of Week Trends**







# **Burglary Crime Analysis: Total at District Level**







# **Burglary Crime Analysis: Total at District Level**

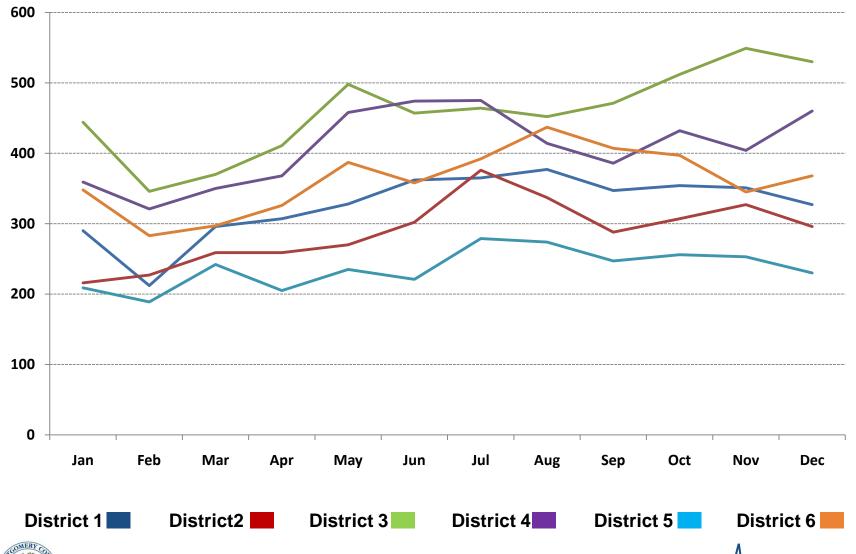
Police District	2003	2004	2005	2006	2007	2008	2009	Grand Total	Percent of Total
1	577	579	548	570	548	551	543	3916	16%
2	536	522	546	483	459	479	439	3464	14%
3	726	763	809	821	758	927	700	5504	22%
4	694	765	674	659	737	731	641	4901	20%
5	476	447	384	386	410	373	364	2840	11%
6	778	701	604	583	611	584	484	4345	17%

Analysis of burglary crime data indicates peaks of incidents during the summer months, as well as during the week, particularly Friday.





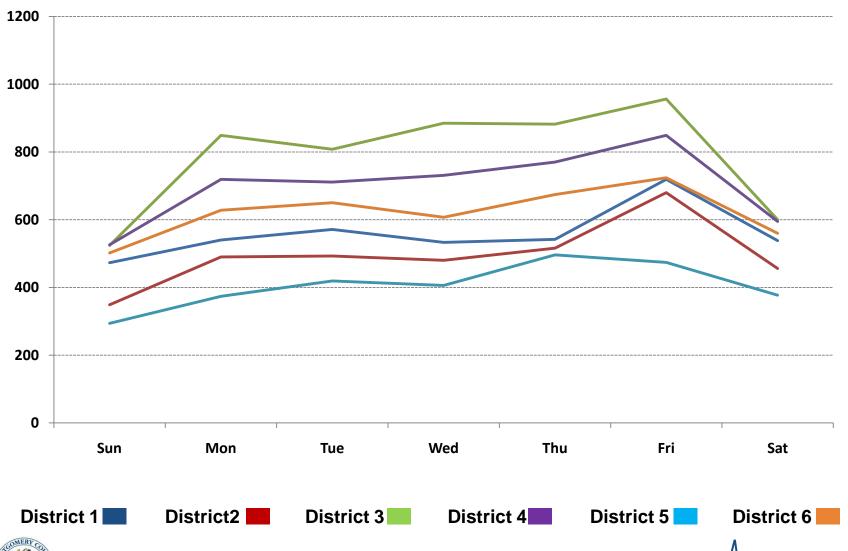
# **Burglary Crime Analysis: Seasonal Trends**



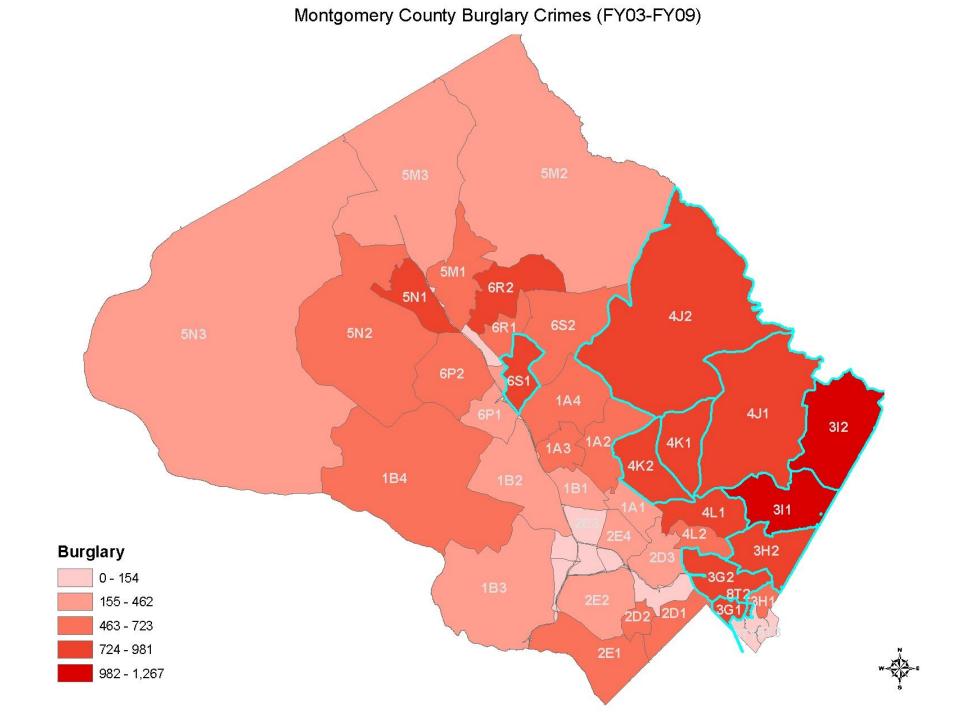




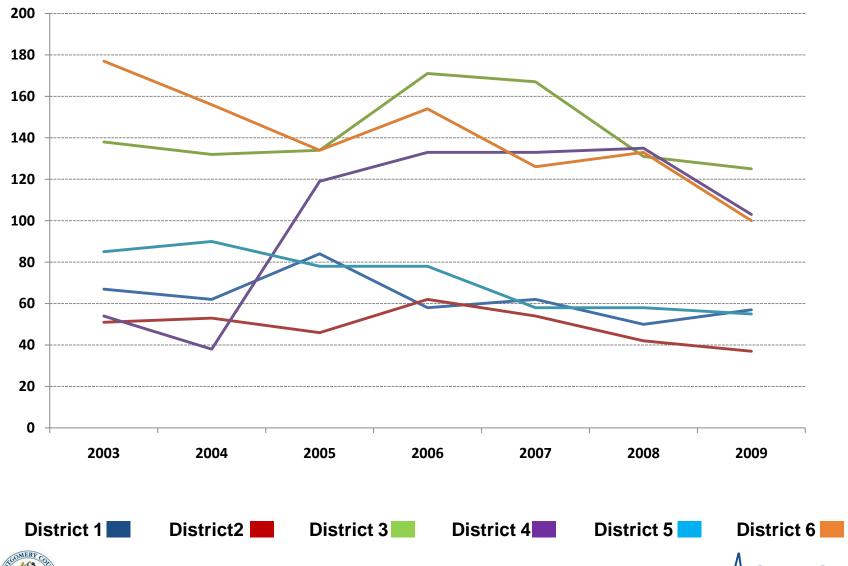
# **Burglary Crime Analysis: Day of Week Trends**







# **Aggravated Assault Analysis: Total at District Level**







# **Aggravated Assault Analysis: Total at District Level**

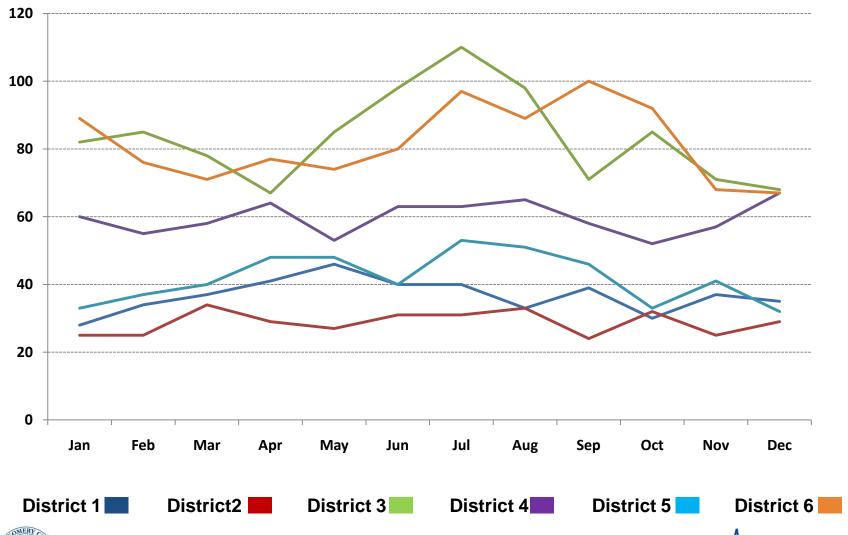
Police District	2003	2004	2005	2006	2007	2008	2009	Grand Total	Percent of Total
1	67	62	84	58	62	50	57	440	11%
2	51	53	46	62	54	42	37	345	9%
3	138	132	134	171	167	131	125	998	25%
4	54	38	119	133	133	135	103	715	18%
5	85	90	78	78	58	58	55	502	13%
6	177	156	134	154	126	133	100	980	25%

Analysis of aggravated assault crime data indicates decreases in high incident districts since FY08 and heightened incidents during the weekend.



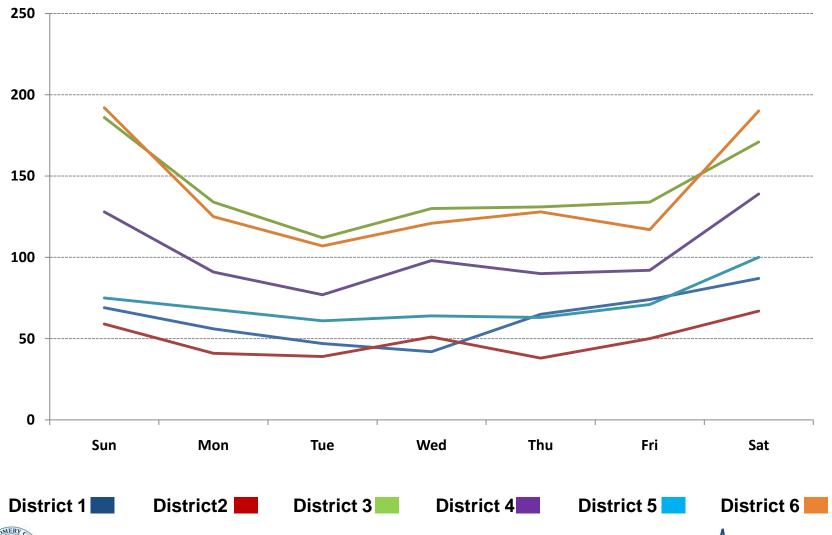


# **Aggravated Assault Analysis: Seasonal Trends**

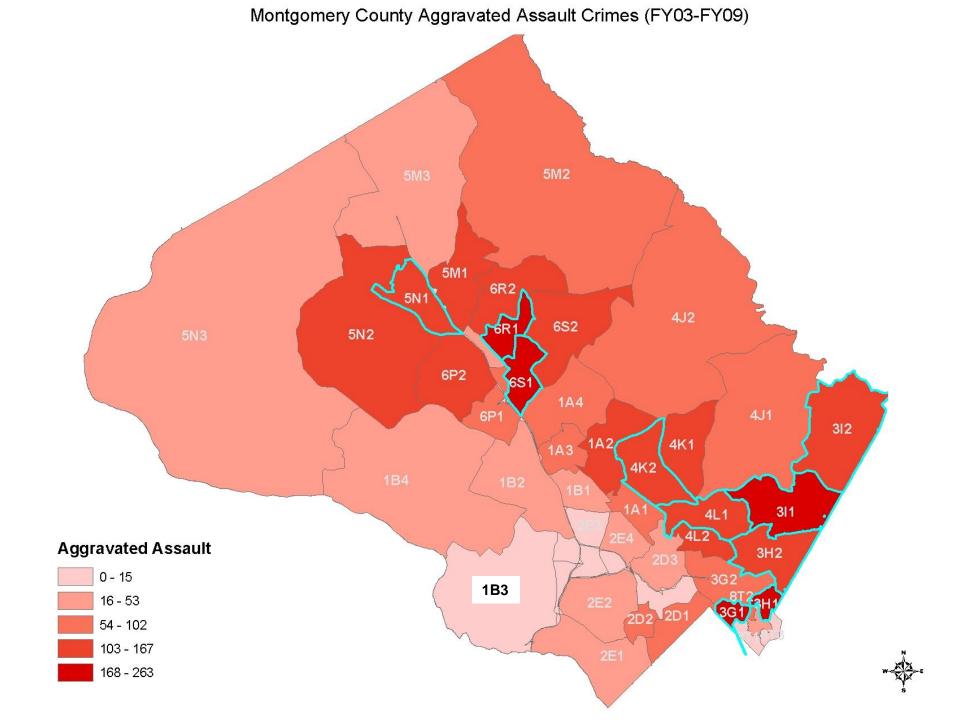




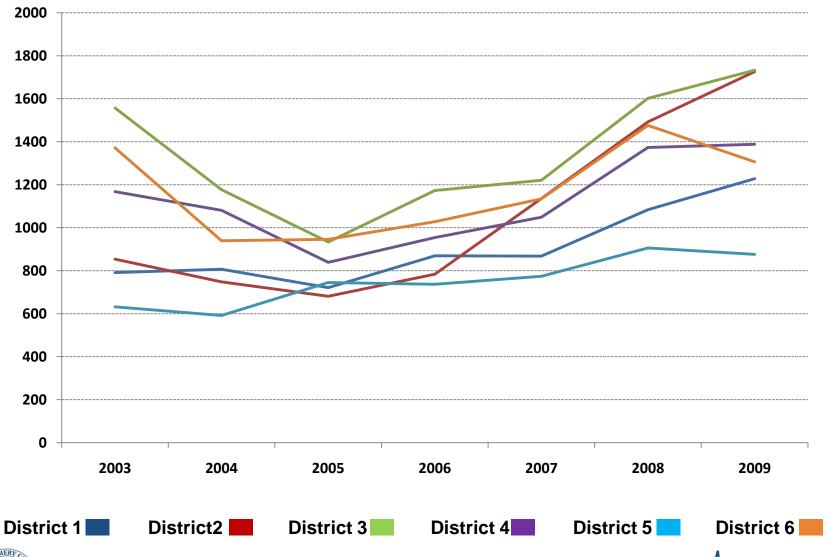
# **Aggravated Assault Analysis: Day of Week Trends**







#### **Thefts From Vehicles: Total at District Level**







#### **Thefts From Vehicles: Total at District Level**

Police District	2003	2004	2005	2006	2007	2008	2009	Grand Total	Percent of Total
1	791	807	721	869	868	1084	1228	6368	14%
2	854	748	681	784	1136	1492	1726	7421	17%
3	1557	1177	933	1173	1221	1602	1733	9396	21%
4	1168	1081	839	954	1049	1373	1388	7852	18%
5	632	592	745	737	774	906	876	5262	12%
6	1372	939	946	1028	1134	1476	1306	8201	18%

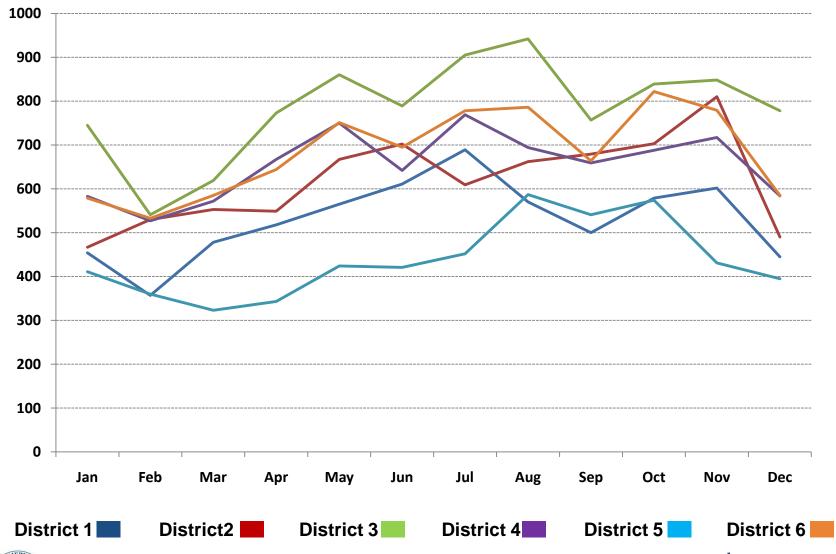
Analysis of thefts from vehicle crime data demonstrates increased incidents overall throughout the county, particularly in District 2.

Analysis also demonstrates drops in total instances during the month of September.





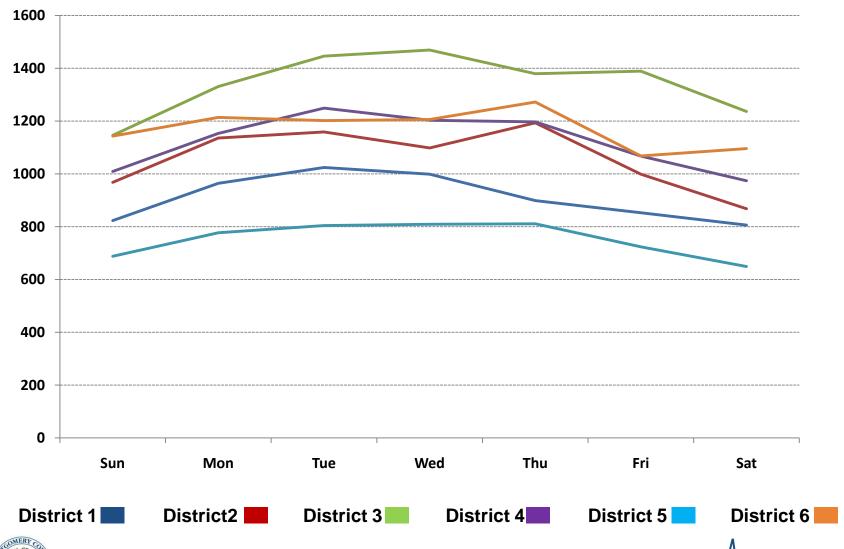
# **Thefts From Vehicles: Seasonal Trends**





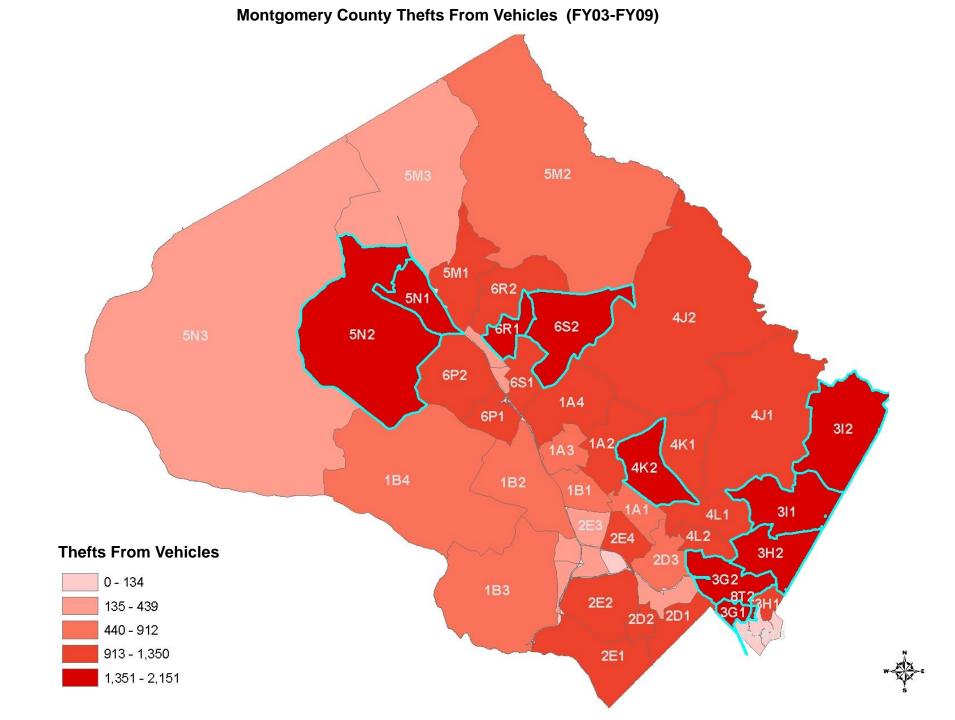


# **Thefts From Vehicles: Day of Week Trends**









# **Public Safety Indicators**



# **CountyStat Indicator Project Overview**

#### **Benchmarking Methodology: Regional Level**

# Criteria for selecting regional jurisdictions

- Inclusion in the Metropolitan Council of Governments (COG)
- Other local jurisdictions commonly compared against

#### Regional jurisdictions

- Maryland
  - Montgomery County
  - Prince George's County
  - Howard County
  - Frederick County
  - Baltimore County
- Virginia
  - Fairfax County
  - Arlington County
  - Loudoun County
  - Prince William County
- District of Columbia

There are a total of 10 jurisdictions included in the regional benchmark.

#### **Jurisdictions in the National Benchmark**

Metro Area	Jurisdictions
DC	Montgomery County, MD
	Howard County, MD
	Anne Arundel County, MD
	Fairfax County, VA
	Arlington County, VA
	Loudoun County, VA
	Prince William County, VA
New York	Nassau County, NY
	Rockland County, NY
	Suffolk County, NY
	Westchester County, NY
	Bergen County, NJ
Newark/	Morris County, NJ
Trenton	Somerset County, NJ
	Middlesex County, NJ
	Monmouth County, NJ
Milwaukee	Waukesha County, WI
Denver	Douglas County, CO

Metro Area	Jurisdictions
Philadelphia	Bucks County, PA
	Chester County, PA
	Montgomery County, PA
San Francisco	Contra Costa County, CA
	Marin County, CA
	San Mateo County, CA
	Santa Clara County, CA
Los Angeles	Ventura County, CA
Chicago	DuPage County, IL
	Lake County, IL
Indianapolis	Hamilton County, IN
Detroit	Oakland County, MI
Minneapolis –	Dakota County, MN
St. Paul	Washington County, MN
Dallas	Collin County, TX
Houston	Fort Bend County, TX
Kansas City	Johnson County, KS

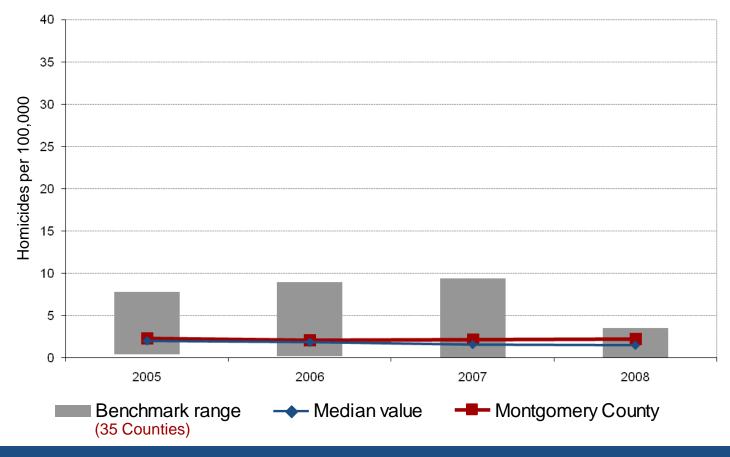
Indicators are sets of data that represent a high-level barometer of County performance and reflect the quality-of-life in Montgomery County.





## **Safe Street and Secure Neighborhoods**

# Indicator: Homicide rate per 100,000 population



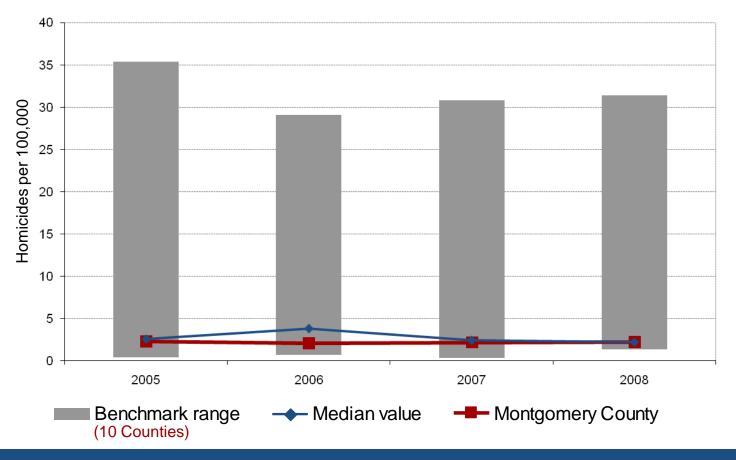
In 2008, the median homicide rate was 1.5 homicides per 100,000 people. Montgomery County's rate was 2.2. In 2008, the highest value was 3.5 and the lowest value was 0.





## **Safe Street and Secure Neighborhoods**

# Indicator: Homicide rate per 100,000 population



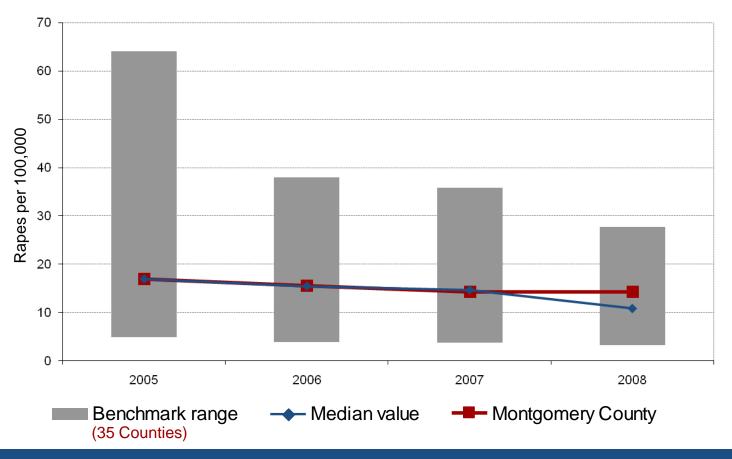
In 2008, the median homicide rate was 2.2 homicides per 100,000 people. Montgomery County's rate was 2.2. In 2008, the highest value was 31.4 and the lowest value was 1.4.





## **Safe Street and Secure Neighborhoods**

# Indicator: Rape rate per 100,000 population



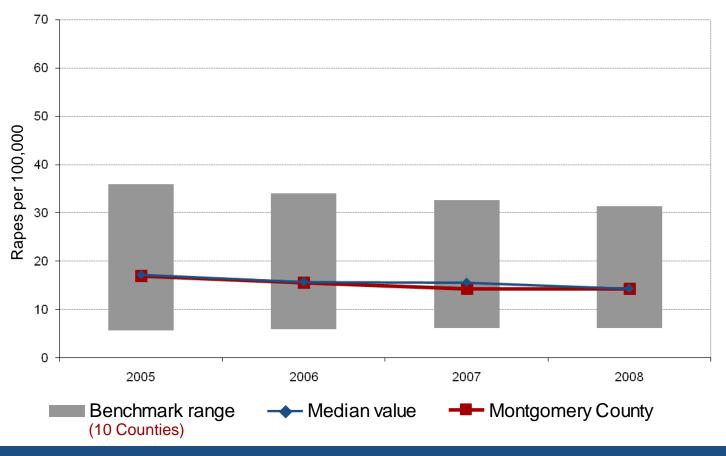
In 2008, the median rape rate was 10.8 rapes per 100,000 people. Montgomery County's rate was 14.3. In 2008, the highest value was 27.7 and the lowest value was 3.2.





## **Safe Street and Secure Neighborhoods**

# Indicator: Rape rate per 100,000 population



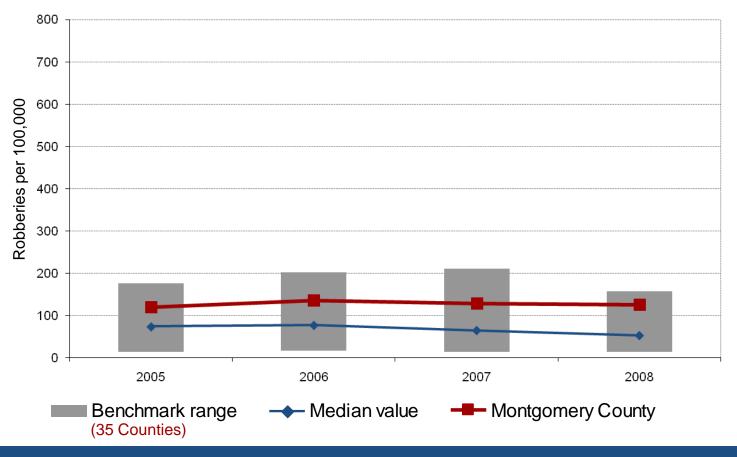
In 2008, the median rape rate was 14.3 rapes per 100,000 people. Montgomery County's rate was 14.3. In 2008, the highest value was 31.4 and the lowest value was 6.1.





## **Safe Street and Secure Neighborhoods**

# Indicator: Robbery rate per 100,000 population



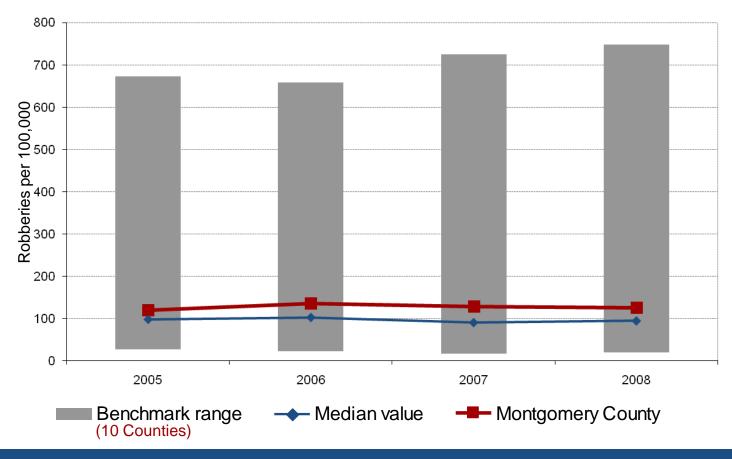
In 2008, the median robbery rate was 52.8 robberies per 100,000 people. Montgomery County's rate was 125.4. In 2008, the highest value was 158.0 and the lowest value was 15.0.





## **Safe Street and Secure Neighborhoods**

# Indicator: Robbery rate per 100,000 population



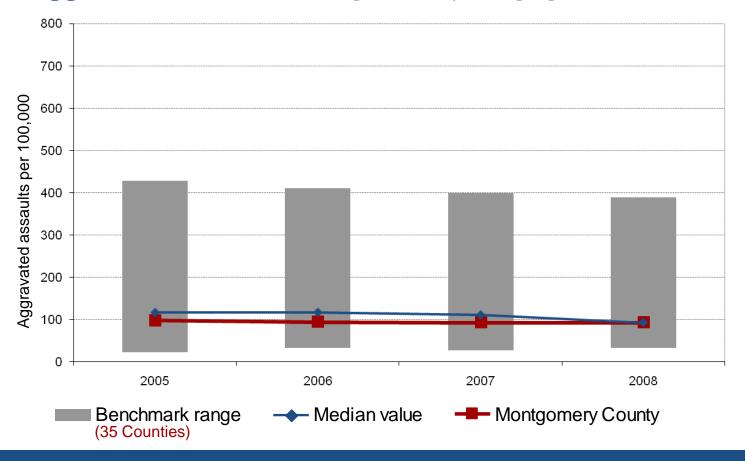
In 2008, the median robbery rate was 94.2 robberies per 100,000 people. Montgomery County's rate was 125.4. In 2008, the highest value was 748.5 and the lowest value was 20.2.





## **Safe Street and Secure Neighborhoods**

# Indicator: Aggravated assault rate per 100,000 population



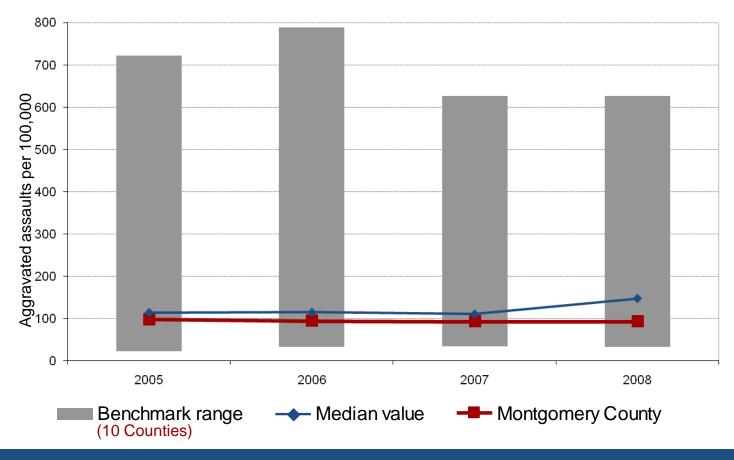
In 2008, the median aggravated assault rate was 92.8 assaults per 100,000 people. Montgomery County's rate was 92.8. In 2008, the highest value was 388.9 and the lowest value was 33.8.





## **Safe Street and Secure Neighborhoods**

# Indicator: Aggravated assault rate per 100,000 population



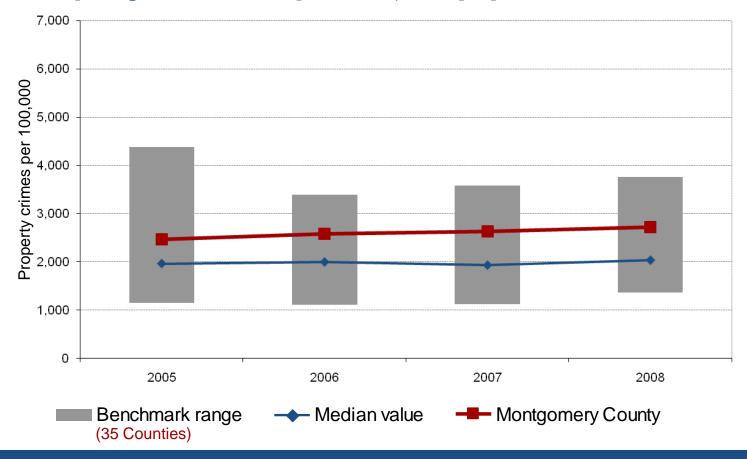
In 2008, the median aggravated assault rate was 147.6 assaults per 100,000 people. Montgomery County's rate was 92.8. In 2008, the highest value was 626.4 and the lowest value was 33.8.





## **Safe Street and Secure Neighborhoods**

# Indicator: Property crime rate per 100,000 population



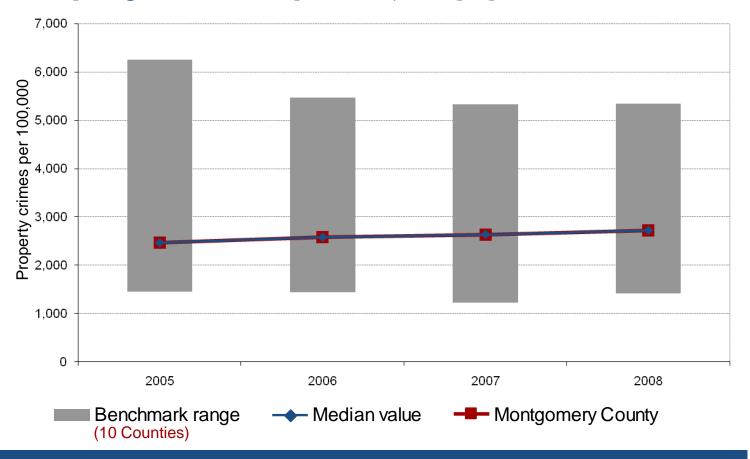
In 2008, the median property crime rate was 2,031 crimes per 100,000 people. Montgomery County's rate was 2,716. In 2008, the highest value was 3,764 and the lowest value was 1,361.





## **Safe Street and Secure Neighborhoods**

# Indicator: Property crime rate per 100,000 population



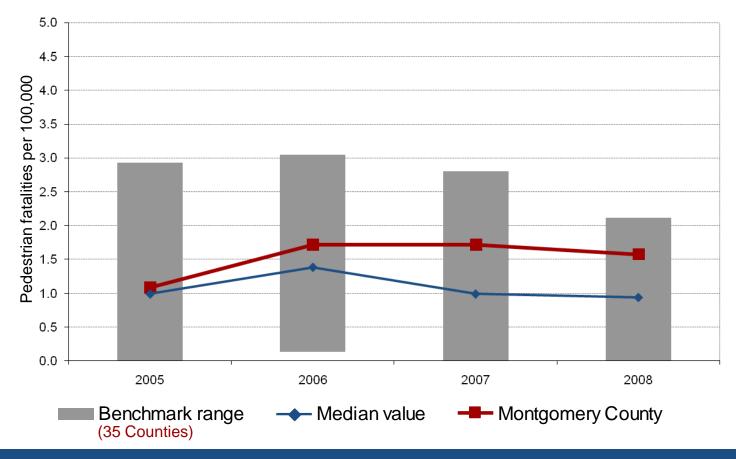
In 2008, the median property crime rate was 2,716 crimes per 100,000 people. Montgomery County's rate was 2,716. In 2008, the highest value was 5,344 and the lowest value was 1,415.





## **Safe Street and Secure Neighborhoods**

# Indicator: Pedestrian fatality rate per 100,000 population



In 2008, the median pedestrian fatality rate was 0.9 fatalities per 100,000 people. Montgomery County's rate was 1.6. In 2008, the highest value was 2.1 and the lowest value was 0.0.

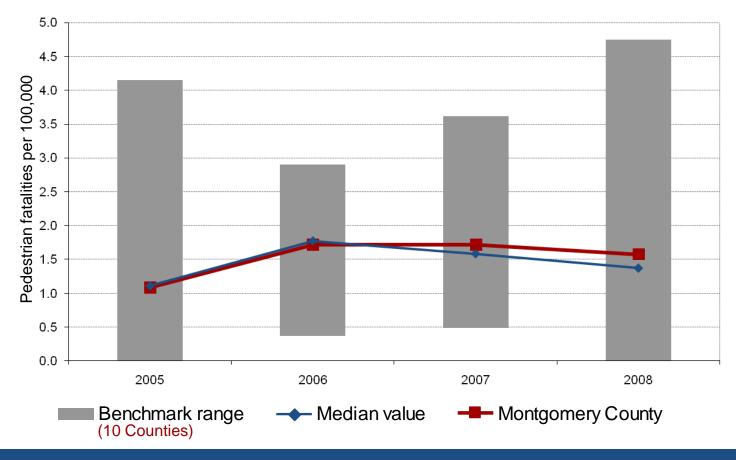


Source: National Highway Traffic Safety Administration: Fatality Analysis Reporting System



## **Safe Street and Secure Neighborhoods**

# Indicator: Pedestrian fatality rate per 100,000 population



In 2008, the median pedestrian fatality rate was 1.37 fatalities per 100,000 people. Montgomery County's rate was 1.58. In 2008, the highest value was 4.75 and the lowest value was 0.0.



Source: National Highway Traffic Safety Administration: Fatality Analysis Reporting System



# **Wrap-Up and Follow-Up Items**

**Follow-Up Meeting** 

